

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Burlington Industries Cheraw - PRP Lead - Removal Polrep
Initial Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV

Subject: POLREP #1
Initial POLREP
Burlington Industries Cheraw - PRP Lead
B49F
Cheraw, SC
Latitude: 34.6977213 Longitude: -79.9146074

To: James Webster, USEPA R4 ERRPB

From: Matthew Huyser, On Scene Coordinator

Date: 3/12/2018

Reporting Period: 10/23/2017 - 3/12/2018

1. Introduction

1.1 Background

Site Number:	B49F	Contract Number:	
D.O. Number:		Action Memo Date:	9/20/2017
Response Authority:	CERCLA	Response Type:	PRP Oversight
Response Lead:	PRP	Incident Category:	Removal Assessment
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	2/19/2018	Start Date:	2/19/2018
Demob Date:		Completion Date:	
CERCLIS ID:	SCN000404896	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

Time-critical removal action; PRP oversight

1.1.2 Site Description

In response to a resident's inquiry about unidentified wastewater units in an undeveloped residential lot in Cheraw, South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) conducted sampling under a Preliminary Assessment (PA) and discovered the presence of Polychlorinated Biphenyls (PCBs) in surface soils. Sampling under an expanded PA and a Site Investigation (SI) revealed the presence of PCBs throughout residential and industrial surface soils near the former Burlington Industries facility, as well as in the drainage ditch and surface water corridor to the Pee Dee River. Public and private properties throughout the surface water corridor have been impacted, including a playground at Huckleberry Park.

The Site was referred to the EPA Region 4 Emergency Response, Removal and Prevention Branch (ERRPB) for a Removal Site Evaluation (RSE). The Site was recommended for a time-critical removal action and an Action Memorandum for initial activities was signed on April 25, 2017. Initial activities include cleanup to address at least six residential properties with concentrations of PCBs greater than 10 times the respective EPA Region 4 Removal Management Level (RML). A ceiling increase action memo was signed on July 13, 2017, for the cleanup of eight additional residential properties with concentrations of PCBs greater than the respective RML. Excavation under the fund-lead action were completed by September 25 and restoration activities (including monitoring and removal of dead trees) are still ongoing as-of March 12, 2018.

An Administrative Settlement Agreement and Order on Consent (AOC) for Removal Action was signed between EPA and Highland Industries for a removal action at the Site. The effective date of the AOC is October 23, 2017. The scope of work under the agreement includes cleanup activities in the Highland Industries property, a segment of the nearby ditch approximately 1900 feet long, and Huckleberry Park.

1.1.2.1 Location

The former Burlington Industries facility is currently owned by Highland Industries, Inc. and is located at 650 Chesterfield Highway, Cheraw, Chesterfield County, South Carolina. The original Burlington Industries property covered 93.8 acres. The central parcel of 51.7 acres, was ultimately sold to Highland Industries, Inc. in 1988. The northern parcel of 25 acres, upon which the former drying beds are located, was sold to a developer in 1990 who subdivided the property into 20 large lots, 11 of which are now occupied by residences. West of the facility is a development of 61 residences along Pecan Drive which was built in the 1960s.

The surface water drainage corridor from the former Burlington Industries facility to the Pee Dee River is approximately 3.2 miles long. Storm water from contaminated soils at the facility and nearby residences flows to a drainage ditch that travels northward approximately 1,000 feet where it joins an unnamed intermittent tributary. The tributary then intersects with Wilson Branch, which borders Huckleberry Park, then intersects with Huckleberry Branch and flows to the Pee Dee River.

1.1.2.2 Description of Threat

Part 302.4 of Title 46 in the Code of Federal Regulations lists PCBs as a hazardous substance under section 102(a) of CERCLA, a toxic pollutant under section 307(a) of the CWA, and as a hazardous air pollutant under section 112 of the CAA. PCBs are also listed as a toxic chemical through section 313 of EPCRA and determined to present an unreasonable risk of injury to health and or the environment under section 2605(e) of the Toxic Substances Control Act (TSCA).

The EPA RML for PCBs Aroclor 1248 is 23 mg/kg for residences and 95 mg/kg on industrial properties. The EPA RML for PCB Aroclor 1254 is different for a calculated Hazard Quotient (HQ) equal to 1 (1.2 mg/kg for residential soil and 15 mg/kg for industrial soil) versus a HW equal to 3 (3.5 mg/kg for residential soil and 44 mg/kg for industrial soil). A cleanup concentration of 1 mg/kg total PCBs has been established for residential, high occupancy, and otherwise unrestricted non-industrial areas.

Photolysis and biodegradation are slow degradation processes for PCBs in the soil and are further limited by increased chlorination of the molecule; as a result, PCBs are inherently persistent in the environment. While both PCB Aroclors found at the Site are considered stable and persistent, Aroclor 1254, which is near the upper range of chlorine content for the family of common PCBs, will likely remain stable for an extended period of time.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

PCB Aroclors 1248 and 1254 were found in ditch sediment samples at concentrations up to 1,900,000 µg/kg and 880,000 µg/kg, respectively. PCB Aroclors 1248 and 1254 were found throughout the Site with highest concentrations near the ditch at the west boundary of the former Burlington Industries facility, followed by decreasing concentrations throughout the surface water drainage corridor. The decreasing concentration trend was observed in both sediments and adjacent surface soils.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

Highland has submitted information on their technical services contractor and potential subcontractors within the twenty day timeframe from the effective date of the consent agreement. A project coordinator was designated within the ten day time frame from the effective date in the consent agreement. A Field Sampling and Analysis Plan (FSAP), Quality Assurance Project Plan (QAPP), and Health and Safety Plan (HASP) were submitted within the thirty day timeframe from the effective date. A Removal Action Work Plan (RAWP) was submitted within the forty-five day timeframe from the effective date.

EPA issued comments to the RAWP, FSAP and QAPP. Responses were returned within 30 days. EPA issued a second set of comments to the FSAP and RAWP on February 2, 2018 but also issued a verbal approval of the plans so that sampling could begin during the month of February. Responses and final versions of the RAWP and FSAP were submitted on March 6, 2018 but dated February 12, 2018.

Highland's contractor mobilized to collect assessment and delineation samples (referred to as "determination samples" in the RAWP, FSAP, and QAPP) on February 19, 2018. EPA and START mobilized to provide oversight and collect split samples. Sampling continued until March 7 with demobilizations over the weekends. A geoprobe was used on the Highland Industries property during the first week to collect soil core samples up to four feet below ground surface (bgs). Due to large diameter gravel content, the geoprobe was unsuccessful in collecting core samples at Huckleberry Park. Hand augering was used to collect soil and sediment samples and Huckleberry Park, the Highland Property, the ditch, and adjacent properties during the second and third weeks of sampling.

Highland's contractor collected samples at one foot intervals up to four feet bgs unless ground water was encountered (shallow groundwater at approximately 24 inches was found at Huckleberry Park in several locations). Only the first and second foot intervals were sent for laboratory analysis while the third and fourth foot intervals were held in storage for later analysis as-needed. EPA's START contractor collected split samples at a 10% rate from those which Highland's contractor sent to a laboratory; these splits sent to a different laboratory are intended to measure quality in sample handling. The 10% rate can be reduced to 5% when data quality criteria, as defined in Section 3 of EPA/START's site-specific QAPP, are satisfied.

EPA's START contractor was tasked to collect additional split samples at depths in the third and fourth foot intervals at the discretion of the sampler in locations and below depths where previous DHEC and/or EPA samples measured high concentrations of PCBs. Additional split samples were collected for analysis of chlorinated pesticides in locations and below depths where previous DHEC samples measured high concentrations of pesticides. Selection of split sample locations that met these criteria were evaluated using digital map layers displaying relative concentration results and depths, and based on sample locations selected by Highland's contractor and the observed soil core profile.

2.1.2 Response Actions to Date

- Submission of RAWP, FSAP, QAPP, and HASP
- Assessment and delineation sample collection

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

An Administrative Settlement Agreement and Order on Consent (AOC) for Removal Action was signed between EPA and Highland Industries for a removal action at the Site.

2.1.4 Progress Metrics

There has been no waste removed from the Site under the PRP-lead removal action

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>

2.2 Planning Section

2.2.1 Anticipated Activities

Highland's contractor has provided a work schedule under the final RAWP which is enforceable under the consent agreement. The upcoming tasks in the schedule are listed below:

TASK	START - END
Laboratory Analysis	2/6/2018 - 4/13/2018
Sample Data Review, Validation, and Compilation	3/26/2018 - 4/30/2018
Final Excavation Limits to be Defined	4/30/2018 - 4/30/2018
Prepare Request for Proposal (RFP)	4/6/2018 - 5/7/2018
Submit RFP to Contractors	5/8/2018 - 5/8/2018
Proposal Timeline	5/8/2018 - 6/4/2018
Proposal Review	6/4/2018 - 6/8/2018
Contractor Selection / Award	6/8/2018 - 6/8/2018

2.2.1.1 Planned Response Activities

- Assessment and delineation of surface and subsurface soils and sediments; (ONGOING)
- Excavate soils/sediments exceeding 1 ppm total PCBs to a depth of up to 24 inches;
- Install engineered controls to prevent the transport of any PCBs from the excavated areas;
- Remove waste materials for proper treatment, recycling, and/or disposal;
- Restore areas impacted by the removal action to appropriate pre-removal conditions; and,
- Implement post-removal site controls in "Low Occupancy Area" where total PCB exceeds 1 ppm.

2.2.1.2 Next Steps

Highland's contractor will complete laboratory analysis, data review, and delineation of excavation limits from the samples that were collected.

EPA's START contractor will complete laboratory analysis of split sample data and review the results against data collected by Highland to measure relative percent difference (RPD) between corresponding samples. A RPD of less than 50% means that frequency of split sampling for confirmation can be reduced to a rate of 5%.

2.2.2 Issues

There is no information to provide in this section.

2.3 Logistics Section

There is no information to provide in this section.

2.4 Finance Section

2.4.1 Narrative

EPA will be using START to assist with oversight of PRP activities, including documentation, photographs, and sample collection. Approximately \$72,000 of the total START costs to date were expended during the fund-lead removal action in 2017.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
TAT/START	\$100,000.00	\$78,000.00	\$22,000.00	22.00%
Intramural Costs				
Total Site Costs	\$100,000.00	\$78,000.00	\$22,000.00	22.00%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

There is no information to provide in this section.

2.5.2 Liaison Officer

There is no information to provide in this section.

2.5.3 Information Officer

There is no information to provide in this section.

3. Participating Entities

3.1 Unified Command

There is no information to provide in this section.

3.2 Cooperating Agencies

There is no information to provide in this section.

4. Personnel On Site

Personnel have demobilized from the Site at the time of this report. Personnel for sampling included:

Highland (1-3)
Highland contractor (4-8)

5. Definition of Terms

There is no information to provide in this section.

6. Additional sources of information

6.1 Internet location of additional information/report

There is no information to provide in this section.

6.2 Reporting Schedule

Progress reports will be submitted by Highland's contractor on a monthly basis. POLREPs will be generated and submitted monthly as well.

7. Situational Reference Materials

There is no information to provide in this section.